

CGC1P Unit 3: People, Places and Patterns

Activity 2: Population Pyramids

Overview

Population data or numbers can be very confusing, especially if you look at numbers applied over many years. In this activity, the student will create and analyze a graph that will help to visualize the patterns of population data.

Lesson

Canada's Population Growth

Demography is the study of population. Canada's population is continuously increasing. We can see this increase over the years by how many people there are in Canada and how much of Canada is inhabited.

- In 1871 there were 3.6 million Canadians.
- In 1911 there were over 7 million.
- In 2004 there were over 31 million people living in Canada.

This population change includes births, deaths, and migration. People who study demographics are interested not only in how big a population is, but also how many people there are in each age group.

Population Pyramids

A simple way to understand the population of an area is to make and read a population pyramid. Population pyramids are divided up according to age. When looking at any population pyramid, there are some basics to keep in mind:

- The male information is on the left hand side.
- The female information is on the right.
- The numbers across the bottom are percentages.
- The numbers up the middle are age groups. This is the age distribution.

How is this Information Collected?

In Canada we have a census every five years (in all years ending in 1 or 6). Every household in the country fills out a questionnaire on Census Day. Personal information, like names, is never used: personal information is gathered to ensure everyone is only counted once.

Most of the information collected is for determining numbers. The government uses computers to add up how many people are living in Canada, or in a part of Canada. They add up the numbers of people of the same age to create the data used in population pyramids. These numbers are called statistics, which

is why the name of the government agency that collects and organizes these numbers is Statistics Canada.

What does it all mean?

As demographers we could use population pyramids to predict the needs for services in our area by looking at things like:

- consumer patterns
- health care needs
- shelter needs
- size of the work force compared to those over 65
- job opportunities for younger Canadians
- pension plans

Population Pyramid Concepts

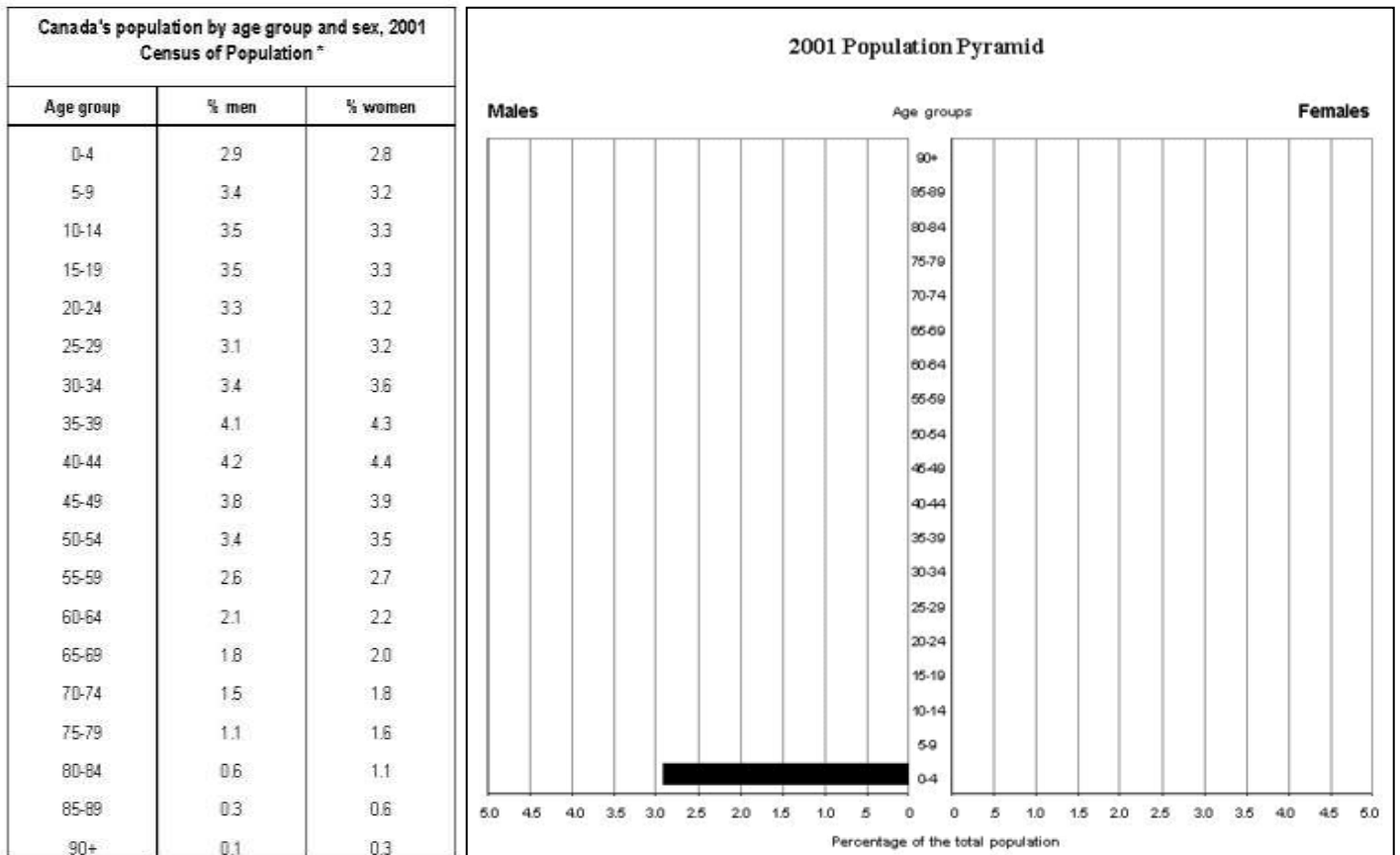
The dependency load refers to the number of people who are restricted from working, usually by age. These are the people who are dependent on others to provide for their needs. The dependency load is used to calculate services needed for the young and the old. In various parts of Canada we have had different types of demographics.

A high birth rate can expand the population of an area. This is occurring in Nunavut where the natural increase rate is significant. In Nunavut, more than half the population is under 20. This is an example of an expanding population. In Newfoundland the population is shrinking. The population growth rate of Manitoba or the North West Territories, on the other hand, is stationary or stable.

Assignment

1. Describe Canada's population growth.
2. In your own words, describe a population pyramid. What information must be included in a population pyramid?
3. How is population information collected in Canada?
4. Why is population information useful for demographers?
5. What is a dependency load?
6. What is happening to the population of Nunavut?
7. What is happening to the population in Newfoundland?

8. Below-left is the data from the 2001 population census. Percentages have been rounded to the nearest tenth of a decimal point and do not necessarily add up to 100. Use this data to complete the population pyramid below-right. To get you started, the 0-4 category for males has already been drawn in. Highlight the bar that represents your age group and sex by shading it in a particular color.



9. What are the details of your age group and sex within the Canadian population?
10. What single age group and sex represents the largest percentage of Canada's population?
11. What percentage of Canada's population is males and what is female (add them together)?
12. What percentage of males and females are age 65 and over?
13. What percentage of the population is of working age (15-65) and are not working age (under 15; over 65)?